CLAIMS

What is claimed is:

1. A method for integrating tire identification data and vehicular identification data, comprising the steps:

   a. manufacturing tire tag means having data retention tag memory;
   b. writing tag means identification data into tag memory;
   c. affixing the tag means to a tire;
   d. writing tire identification data identifying the tire into the tag memory;
   e. associating the tire with a specific vehicle;
   f. reading the tire identification data from the tag memory into a vehicle data retention memory.

2. A method according to claim 1, wherein further comprising the step of uploading the tire identification data from the vehicle data retention memory to an archive database.

3. A method according to claim 1, wherein steps a and b are conducted by a tire tag means supplier; steps c and d are conducted by a tire supplier; and steps d, e, f, and g are conducted by a vehicle manufacturer.

4. A method according to claim 1, wherein further comprising the steps of:
   calibrating tag functions; and
   including tag functions calibration data into the tag means identification data.

5. A method according to claim 1, further comprising the steps:
   reading the tire identification data from the vehicle data retention memory; and
   rewriting the vehicle identification code from the vehicle.

6. A method according to claim 1, further comprising the step of manufacturing the tag means to include a transponder and antenna assembly.

7. A method according to claim 6, further comprising the step of manufacturing the antenna in an annular form coupled to the transponder.

8. A method according to claim 1, further comprising the step of writing a vehicle identification code identifying the specific vehicle into the tag memory.

9. A method for integrating tire identification data and OEM vehicular identification data in a vehicle having a tire based sensor system, comprising the steps:
   a. manufacturing tire tag means comprising a transponder and a tire tag having at least a pressure sensor;
   b. calibrating the pressure sensor for tag functions;
   c. writing tag identification and calibration data into tag memory;
   d. transferring the tag means to a tire manufacturer;
   e. manufacturing a tag and antenna assembly;
   f. integrating the tag and antenna assembly into a tire;
   g. writing tire identification data into tag memory;
   h. transferring the tire to an OEM;
   i. initializing a vehicle system;
   j. reading tire identification data from tag memory into an electronic control unit of the vehicle; and
   k. uploading tire identification data from the electronic control unit to an OEM data base.

10. A method according to claim 9 including the step of writing an OEM part number into the tag memory prior to transferring the tire to an OEM.

11. A method according to claim 9 including the step of validating the tire identification data in the vehicle electronic control unit against the tire identification data of tires used by the vehicle throughout the lifecycle of the vehicle.

12. A method according to claim 9 including the step of writing a vehicle identification number to tag memory.

13. A method for integrating tire data into the information system of a vehicle, comprising the steps:

a. mounting a tire to a production line vehicle chassis, the tire having tire data storage means for storing tire identification data;

b. connecting the tire data storage means to a vehicle electronic control unit (ECU) having ECU data storage means;

c. reading tire identification data from the tire data storage means into the ECU data storage means; and

d. uploading the tire identification data from the ECU data storage means to an OEM database.

14. A method according to claim 13 further comprising the steps:
incorporating a tire pressure monitoring system into the tire; and
including tire pressure monitoring system identification data in the tire identification data.

15. A method according to claim 14 further comprising the step of
incorporating tire pressure monitoring system operational parameters in the tire identification data.

16. A method according to claim 13 further comprising the steps:
incorporating vehicle identification data into the ECU database means;
uploading the vehicle identification data from the ECU data storage means to the OEM database.

17. A method according to claim 13, further comprising the steps:
running a diagnostic test on the vehicle substantially at the conclusion of vehicle assembly; and
reading the tire identification data from the tire data storage means into the ECU data storage means substantially contemporaneous with the running of the diagnostic test.

18. A method according to claim 13 further comprising the step of connecting the tire data storage means to the vehicle electronic control unit by means of a vehicle data bus.